Jerry Fulcher, DEQ 5-18-12

Some typical Costs- costs can vary considerably depending on soil conditions, utility conflicts, storm sewer requirements, land use, terrain, moving dirt or having to blast through rock.

1) MDOT US-41 near Baraga- $2.9 million for 1.5 miles of road ($1.93 million per mile), included $260,00 for ROW costs, $243,00 for engineering
    - Road was offset 0-100 feet
    - 5.5 inches of asphalt- 3 layers
    - Flat terrain
    - 1 cross culvert
    - Included re-building a railroad intersection

2) MDOT UP- average cost to reconstruct bituminous paving is $956,000 per lane mile or or $1.9 million for a 2 lane road.

County Projects- asphalt not at thick typically 3-4 inches

3) Ingham County- $400,000-$600,000 per lane mile for reconstruction or $800,000-$1.2 million for a 2 lane road.
    - Design fees 7-12% of construction costs
    - Construction engineering 8-13% of construction
    - ROW varies widely- $0.35 a sft for rural areas up to $22 a sft in some urban settings

4) Allegan County- $200,000 per mile on gravel roads with decent soils, minimal dirt movement, add $140,000 per mile to add 3 inches of asphalt.
    - Design fees $8000 for a consultant
    - ROW 0-$5,000
    - Estimating about $1,000,000 for a new 1 mile section of paved all seasons road next year with $20,000 for design engineering and $50,000 for ROW.

5) Wexford County- $500,000 per mile for a standard new county road with decent soils, nothing special- not including engineering or ROW.
    - $300,000-$400,000 per mile to reconstruct a standard generic road not hills or big cuts, no undercuts or swamp work
    - $900,000 per mile estimate for a current urban reconstruct job out for bid with a bridge and cul-de-sac
    - $3 million per mile to reconstruct road in downtown Cadillac
    - $6 million per mile to build US 131 freeway around Manton not including bridges

6) Eaton County- $2.6 million bid for new 1 mile section of road (currently gathering more details)
    - 10% for design
    - 10-15% extra for construction

Given to MCRC 6/29/12

Things to look for when considering mitigation sites:

- Sites that will provide compensation for habitat fragmentation
    - Areas adjacent to existing wilderness areas (eg. along the McCormick Wilderness)
    - Sites that are not already fragmented
    - Sites that will not be isolated by development/logging (i.e. logged around the perimeter)
    - Sites in which whole wetland complexes will be protected/not fragmented.
- High quality resources important to the ecosystem
    - Headwater areas to the Dead or Yellowdog
    - Riparian Areas
    - Important wildlife habitat (eg. Hay Meadows Area, Mouth of the Huron)
    - Look at the Michigan Natural Features Inventory to find resources in areas that have not yet been logged (or have recovered from logging)
- Demonstrable threat: logging? Etc?
- Large sites (1-3 >100 acre sites for all wetland impacts)
- Ratios are based on functional replacement.
- There must be a management plan including a financial mechanism for protection.
- Land must be managed by a 3rd party land manager with experience.

Fwd: Moose Map

Pennala, Virginia (DEQ) to: Sue Elston, Melanie Haveman, Jean.M.Battle2@usace.army.mil 08/31/2012 06:47 AM

Cc: "Casey, Steve (DEQ)"

From: "Pennala, Virginia (DEQ)" <PENNALAV@michigan.gov>
To: Sue Elston/R5/USEPA/US@EPA, Melanie Haveman/R5/USEPA/US@EPA, "Jean.M.Battle2@usace.army.mil" <Jean.M.Battle2@usace.army.mil>,
Cc: "Casey, Steve (DEQ)" <CASEYS@michigan.gov>

2 attachments

CR 595 and moose.doc ATT00001.htm

Sent from my iPad

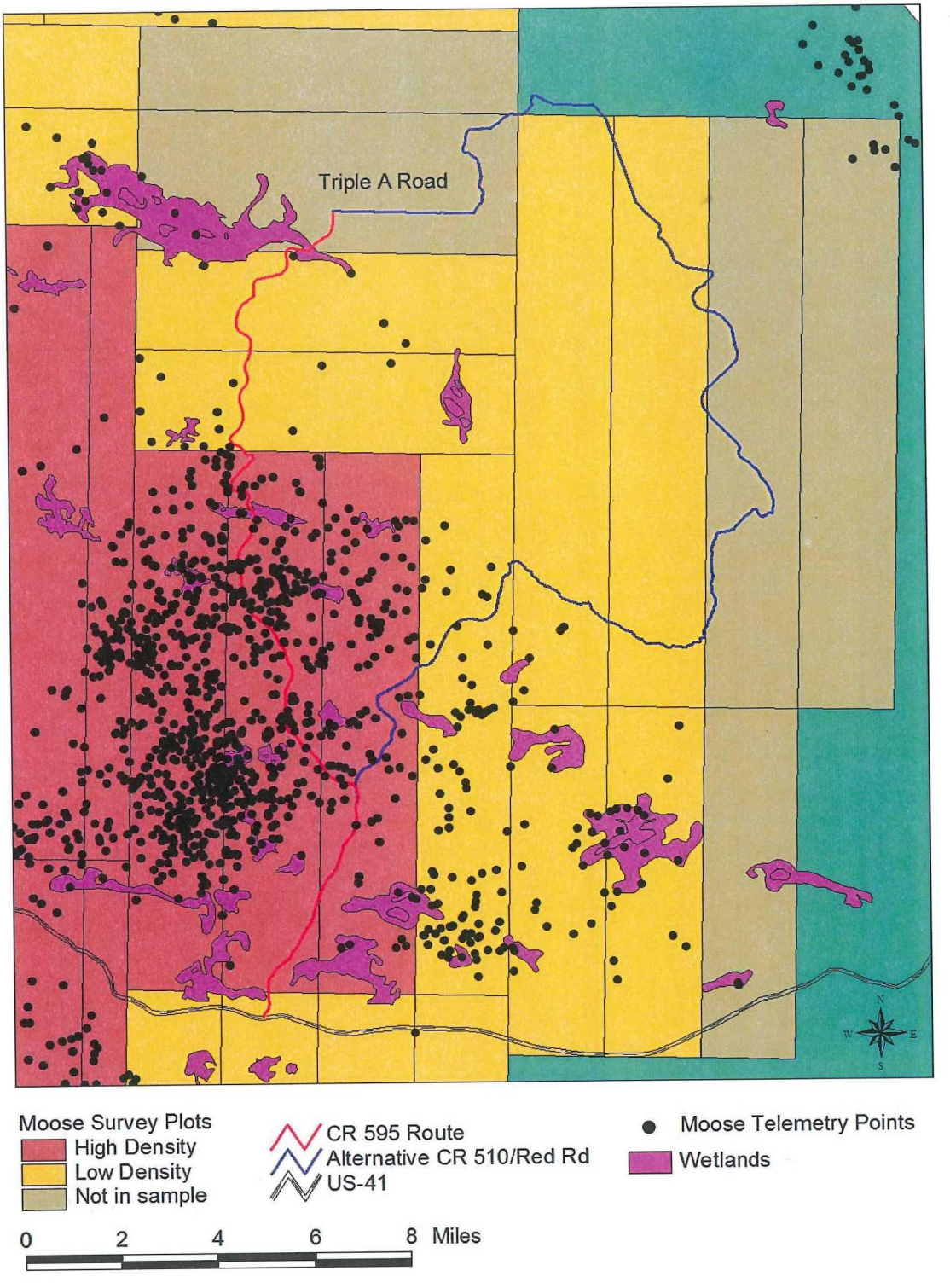
Begin forwarded message:

From: "Roell, Brian (DNR)" <ROELLB@michigan.gov<mailto:ROELLB@michigan.gov>>
To: "Pennala, Virginia (DEQ)" <PENNALAV@michigan.gov<
mailto:PENNALAV@michigan.gov>>
Subject: Moose Map

Here is the moose map you requested. Also, if folks have any other questions on moose or other wildlife please encourage them to contact me.

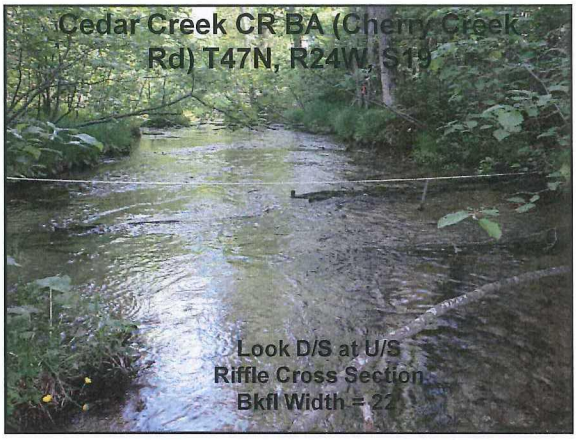
Brian Roell
Wildlife Biologist
1990 US 41 South
Marquette Michigan
Michigan Department of Natural Resources

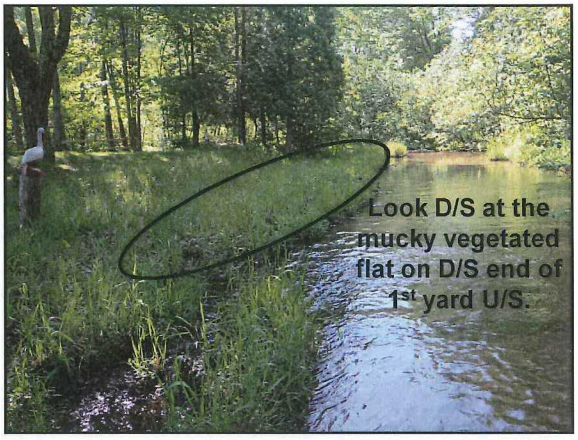
Don't let your summer slip away. Get outdoors and explore Michigan's wetland wonders. Visit a managed waterfowl area, the ultimate water garden and wildlife viewing opportunity.

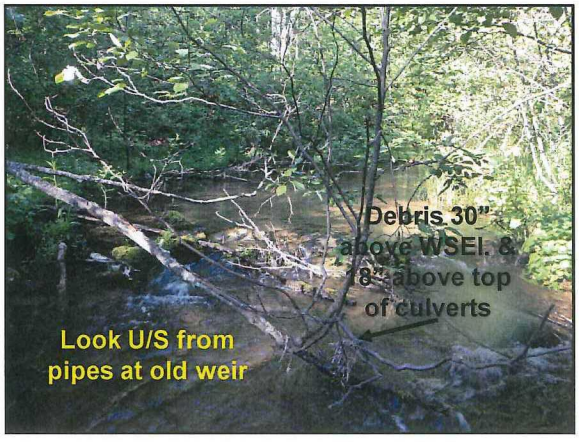

Triple A Road
Moose Survey Plots
High Density
Low Density
Not in sample
CR 595 Route
Alternative CR 510/Red Rd
US-41
Moose Telemetry Points
Wetlands
0
2
4
6
8 Miles

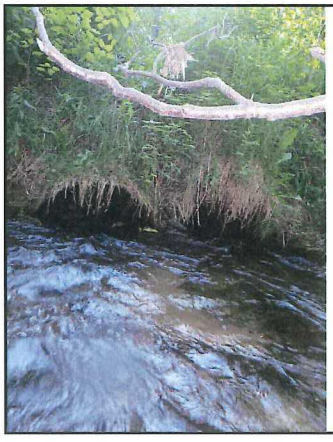
Marquette County Road Commission June 2012 Proposed Stream Mitigation Sites for the CR 595 Application

Evaluations conducted by:
Mitch Koetje
MDEQ Water Resource Division
UP District Office

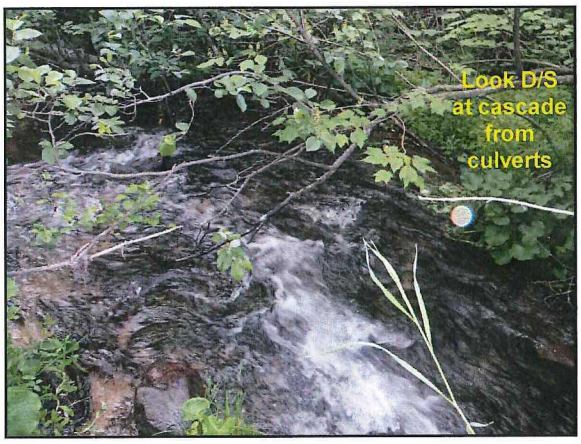


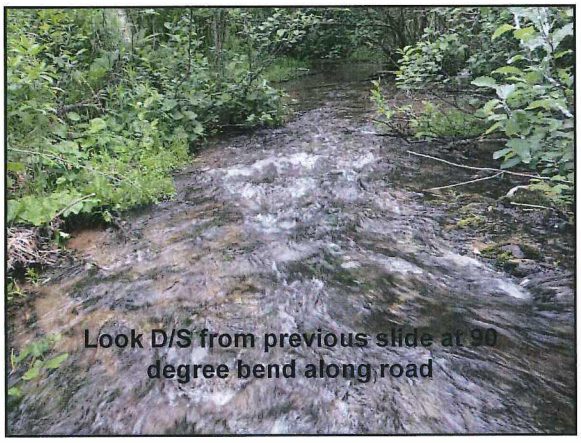


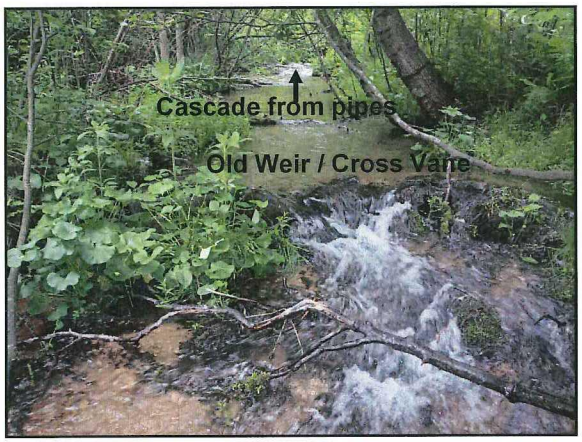


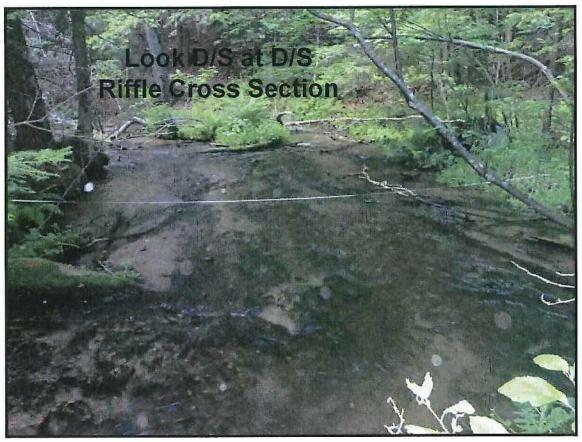


U/S side of culverts Twin 4' x 43' long CMPs


Look D/S
at cascade
from
culverts


Look D/S from previous slide at 90
degree bend along road


Cascade from pipes
Old Weir / Cross Vane


Look D/S at D/S
Riffle Cross Section

CONVERSATION RECORD		TIME 10:45 AM	DATE 8-8-2012
TYPE _____VISIT _____ CONFERENCE ____XX____TELEPHONE [X] Incoming [ ] Outgoing Location for visit or conference			ROUTING
NAME OF PERSON (S) CONTACTED OR IN CONTACT WITH YOU: Michael Leslie	ORGANIZATION (office dept. bureau, ect) ARD Controlled Strategies Division	TELEPHONE NO. 353-6680	
NAME OF PERSON DOCUMENTING THE CALL Melanie Haveman	SIGNATURE OF PERSON DOCUMENTING THE CALL		
SUBJECT: Transportation Emissions Question			

Michael called me in response to the following 8-8-12 e-mail:

Hello,

You are listed as the air contact for transportation planning and mobile sources modeling in Michigan so I am hoping you are able to answer my question.

I'm reviewing a wetlands permit for a proposed new road. The applicant has included an emissions calculation to defend the use of a shorter road with more wetlands impacts. I was wondering if you could help me determine if the assessment is valid, and if the difference in emissions is significant. The traffic estimates used are only relevant for 8 years (life of the mine which is responsible for the road)

I included the entire document, but the part that I was wondering if you could look at is on page 168-173 (especially Table 5-12)

This is not something we generally evaluate, but the RA has specifically asked us to so any help you could give me would be appreciated. Feel free to call me if you have any questions.

Thank you,
Melanie Haveman
U.S. EPA (ww-16j)
77 W. Jackson Blvd
Chicago, Illinois 60604
312-886-2255

CR 595 AAPA FINAL 6.29.12.pdf

In response, Michael noted that the analysis was insufficient, and that the model that was used was only meant to be used in California, and it was not appropriate for use in Michigan. He also said that the area was not in non-attainment for air quality; therefore, increased emissions would not be appropriate criteria to use one road over another.